# TITLE 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER ADOPTION OF MODIFICATIONS TO ARB METHOD 310 TO INCLUDE THE DETERMINATION OF LOW VAPOR PRESSURE-VOLATILE ORGANIC COMPOUNDS (LVP-VOC) IN CONSUMER PRODUCTS

## **AND**

AMENDMENTS TO THE DEFINITION AND TEST METHOD SECTIONS OF THE CALIFORNIA REGULATIONS TO INCLUDE THE DETERMINATION OF LOW VAPOR PRESSURE-VOLATILE ORGANIC COMPOUNDS (LVP-VOC) IN ANTIPERSPIRANTS AND DEODORANTS, CONSUMER PRODUCTS, AND AEROSOL COATING PRODUCTS

The Air Resources Board (the Board or ARB) will conduct a public hearing at the time and place noted below to consider the adoption of modifications to the ARB Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products," to include the determination of low vapor pressure-volatile organic compounds (LVP-VOC). At the hearing the Board will also consider the adoption of amendments to the definition and test method sections of the Regulation for Reducing VOC Emissions from Antiperspirants and Deodorants, the Regulation for Reducing VOC Emissions from Consumer Products, and the Regulation for Reducing VOC Emissions from Aerosol Coating Products.

Date: November 19, 1998

Time: 9:30 a.m.

Place: Air Resources Board

Hearing Room, Lower Level

2020 L Street

Sacramento, California

This item will be considered at a two-day meeting of the ARB, which will commence at 9:30 a.m., November 19, 1998, and may continue at 8:30 a.m., November 20, 1998. This item may not be considered until November 20, 1998. Please consult the agenda for the meeting, which will be available at least 10 days before November 19, 1998, to determine the day on which this item will be considered.

This facility is accessible to persons with disabilities. If accommodation is needed, please contact ARB's Clerk of the Board at (916) 322-5594, or (800) 700-8326 for TDD calls from outside the Sacramento area by November 5, 1998.

# INFORMATIVE DIGEST OF PROPOSED ACTION AND PLAIN ENGLISH POLICY STATEMENT OVERVIEW

**Sections Affected:** Amendments are being proposed to sections 94506(a), 94506.5, 94508(a)(78), 94515(a), and 94526, Title 17, California Code of Regulations (CCR), in order to revise the definition of LVP-VOC, to modify ARB Method 310, and to incorporate by reference those modifications to ARB Method 310 in the consumer products regulations.

**Background:** Section 41712 of the California Health and Safety Code requires the ARB to adopt regulations to achieve the maximum feasible reduction in reactive organic compounds (ROC) emitted by consumer products ("ROC"is equivalent to "VOC"). To date, the Board has adopted three regulations which establish VOC limits for various categories of consumer products. These regulations are the Regulation for Reducing VOC Emissions from Antiperspirants and Deodorants (the "antiperspirant and deodorant regulation"; sections 94500-94506.5, Title 17, CCR), the Regulation for Reducing VOC Emissions from Consumer Products (the "consumer products regulation"; sections 94507-94517, Title 17, CCR), and the Regulation for Reducing VOC Emissions form Aerosol Coating Products (the "aerosol coatings regulation"; sections 94520-94528, Title 17, CCR).

Each of these regulations contains a section specifying the applicable test methods. The test methods sections of the regulations are section 94506 (antiperspirants and deodorants), section 94515 (consumer products), and section 94526 (the aerosol coating products), Title 17, CCR. These sections incorporate a number of different test methods by reference. Some of the incorporated test methods are used to determine compliance with the applicable VOC limits, and some of the test methods are used to determine other types of compliance.

At its public hearing on November 21, 1996, the Board adopted Resolution 96-57 approving Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products". At this hearing, the Board approved proposed amendments with various modifications to the originally proposed language. Revisions were approved to both Method 310 and to the test methods sections of the regulations specifically stating that Method 310 did not apply to the determination of LVP-VOCs in products. The revisions were adopted on September 25, 1997.

Since adoption of the modifications to the test method in 1997, ARB staff has worked closely with the public, including industry representatives, to develop a definition for LVP-VOC that would be both flexible and technically enforceable.

**Description of the Proposed Regulatory Action:** The ARB staff is proposing revisions to the definition of low vapor pressure-volatile organic compound (LVP-VOC) and to ARB Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products." The proposed amendments to the definition would specify criteria for determining whether compounds or mixtures qualify as LVP-VOCs. These proposed amendments would be used in determining compliance with the applicable VOC limits, and the test methods as modified would be

incorporated by reference in the test methods sections of the ARB regulations for antiperspirants and deodorants, consumer products, and aerosol coating products. The new test methods proposed to be incorporated by reference are ASTM D 86-96 (approved April 10, 1996), ASTM D 850-93 (approved April 15, 1993), ASTM 1078-97 (approved July 10, 1997), and ASTM D 2879-97 (approved April 10, 1997) as modified in Appendix B of ARB Method 310.

A product that initially does not appear to meet the applicable VOC standards may indeed be in compliance because it contains chemical compounds or chemical mixtures that qualify for the LVP-VOC exemption. Under the proposed modifications, if a product appeared not to meet the VOC standards, the Executive Officer would request the product manufacturer or responsible party to supply product formulation data. The Executive Officer currently has broad discretion to verify the accuracy of the formulation data. This includes conducting testing if the boiling point or vapor pressure is unknown. Such testing includes:

- 1. conducting testing in accordance with ASTM D 86-96 to determine the boiling point.
  - a. if the boiling point is greater than 216°C, then the sample is an LVP-VOC, and exempt.
  - b. if the boiling point is less than 216°C, determine if the sample qualifies for partial LVP-VOC status, using the specified procedure.
- 2. verifying LVP-VOC status by direct measurement of the vapor pressure using ASTM 2879-97, as modified in appendix B of the proposed ARB Method 310.

If a compound or mixture qualifies as an LVP-VOC, recalculate the percent VOC of the product using the formula as specified in Section 4.0 of the ARB Method 310.

Staff proposes changes to section 94506.5 to ensure consistent language with sections 94515 (consumer products regulation) and 94526 (aerosol coatings regulation). Under this section, for purposes of federal enforceability, the US EPA is not subject to approval determinations made by the ARB Executive Officer.

Staff proposes minor revisions to section 94526, subsections (c) and (e). These revisions delete language that is no longer necessary from a previous version of ARB Method 310.

Additionally, staff proposes updating seven reference test methods listed in Section 2 of Method 310 and incorporating them by reference. These reference methods, which have been recertified by ASTM and US EPA on the dates indicated, are the following: ASTM D 859-94 (approved May 15, 1994), ASTM D 2369-97 (approved July 10, 1997), ASTM D 3063-94 (approved November 15, 1994), ASTM D 3074-94 (approved November 15, 1994), ASTM D 3792-91 (approved May 15, 1991), ASTM D 4017-96a (approved July 10, 1996), and US EPA Method

8240B (approved September 1994). Staff also proposes clarifying that three methods referred to in section 94526 are incorporated by reference: ASTM 523-89 (approved March 31, 1989), ASTM D 1213-91 (approved May 15, 1991), and ASTM D 5043-90 (approved April 27, 1990).

Staff proposes to add USEPA Method 8260B (approved December 1996). This method differs from USEPA Method 8240 by allowing the use of a capillary GC column. Otherwise, the two methods are essentially identical.

Staff proposes to replace the South Coast Air Quality Management District (SCAQMD) Test Method 311 with SCAQMD Test Method 318. Test Method 311 determines the metal content of metallic aerosol coating products and is incorporated by reference in section 94526, subsection (c). In July 1996 the SCAQMD replaced Test Method 311 with Test Method 318, and staff proposes substituting Test Method 318 into section 94526, subsection (c), to be consistent.

Finally, staff proposes conforming revisions to the regulations to be consistent with the proposed modifications to the test method sections.

Comparable Federal Regulations: The US EPA has published a final rule, *National Volatile Organic Compound Emission Standards for Consumer Products*, which appeared in the Federal Register on September 11, 1998 (63 Fed. Reg. 48819). The federal rule specifies LVP-VOC criteria for exemption consideration and is similar in this regard to the ARB consumer products regulation. However, the US EPA's rule does not include a test method that is comparable with the proposed modified Method 310. Instead, the US EPA's rule relies predominately on formulation information to demonstrate compliance with its regulation.

The proposed modifications to Method 310 incorporate ASTM test methods by reference, many of which are also incorporated by reference in the Code of Federal Regulations. However, the test methods incorporated in the Code of Federal Regulations are not used in the same manner as described in Method 310 (i.e., the federal test methods are not used to determine LVP-VOC status for consumer products).

## AVAILABILITY OF DOCUMENTS AND CONTACT PERSON

The ARB staff has prepared an Initial Statement of Reasons (ISOR) for the proposed regulatory action which includes a summary of the environmental and economic impacts of the proposal and technical support documentation. Copies of the ISOR may be obtained from the ARB's Public Information Office, 2020 L Street, Sacramento, California 95814, (916) 322-2990, at least 45 days prior to the scheduled hearing. The ISOR contains the full text of the proposed action. The staff has also compiled a record which includes all information upon which the proposal is based. This material is available for inspection upon request to the contact person identified immediately below. The ARB has determined that it is not feasible to draft the regulation in plain English due to the technical nature of the regulation; however, a plain English summary of the regulation is available from the agency contact person named in this notice, and is also contained in the ISOR for this regulatory action.

To obtain this document in an alternative format, please contact the Air Resources Board ADA Coordinator at (916) 322-4505, TDD (916) 324-9531, or (800) 700-8326 for TDD calls from outside the Sacramento area.

Further inquiries regarding this matter should be directed to George Lew of the Board's Engineering and Laboratory Branch, P.O. Box 2815, Sacramento, California 95812, (916) 263-1630. Further information may also be found by visiting the Internet at:

http://www.arb.ca.gov/regact/conspro/lvpvoc/lvpvoc.htm

#### COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred in reasonable compliance with the proposed regulatory action are presented below.

The Executive Officer has determined that the proposed regulatory action will not create costs or savings, as defined in Government Code section 11346.5(a)(6), to any state agency or in federal funding to the State, costs or mandate to any local agency or school district whether or not reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to local agencies.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on private persons and businesses. The Executive Officer has determined in accordance with Government Code section 11346.5(a)(8), that the proposed regulatory action will not have a significant adverse economic impact on businesses, including the ability of California businesses to compete with businesses in other states, or, in accordance with Government Code section 11346.5(a)(9), on directly-affected businesses or private persons. In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or the elimination of existing businesses in California, or the expansion of businesses currently doing business within California. In accordance with Government Code section 11346.5(a)(11), the Executive Officer has determined that adoption of the proposed amendments will not have a significant effect on housing costs. An assessment of the economic impacts of the proposed amendments can be found in the ISOR.

The Board's Executive Officer has also determined, pursuant to Government Code section 11346.5(a)(3)(B), that the regulation will affect small business.

Before taking final action on the proposed regulatory action, the ARB must determine that no alternative considered by the agency would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons or businesses than the proposed action.

#### SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing. To be considered by the ARB, written submissions must be addressed to and received by the Clerk of the Board, Air Resources Board, P.O. Box, 2815, Sacramento, CA 95812, or 2020 L Street, 5th Floor, Sacramento, CA 95814, no later than 12:00 noon November 18, 1998, or received by the Clerk of the Board at the hearing.

The ARB requests, but does not require, that 20 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing. The ARB encourages members of the public to bring any suggestions for modification of the proposed regulatory action to the attention of staff in advance of the hearing.

## STATUTORY AUTHORITY AND HEARING PROCEDURES

This regulatory action is proposed under the authority granted to the ARB in sections 39600, 39601, 39607, 41511, and 41712 of the Health and Safety Code. This action is proposed to implement, interpret, or make specific sections 39002, 39600, 39607, 40000, 41511, and 41712 of the Health and Safety Code.

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Title 2, Division 3, Part 1, Chapter 3.5 (commencing with section 11340) of the Government Code. Following the public hearing, the ARB may adopt the regulatory language as originally proposed or with nonsubstantial or grammatical modifications. The ARB may also adopt the proposed regulatory language with other modifications if the modifications are sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action. Staff is evaluating whether an additional method, such as ebulliometry or some similar method, could be used to determine vapor pressure. If an additional method is found to be suitable, staff will propose to include it in these modifications. In the event that such modifications are made, the full regulatory text, with the modifications clearly indicated, will be made available to the public for written comment at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, 2020 L Street, Sacramento, California 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Michael P. Kenny Executive Officer

Date: September 22, 1998